



Larry Antonelli
<larry.antonelli@epa.state.oh.us>

03/21/2007 07:16 AM

To
Subject Evaluation at CRS

EPA Region 5 Records Ctr.



374521

Greetings, Gwen and Tom-

I looked over the data carefully, and thought about several things. Unfortunately, I came to the realization that my idea to group areas of the 0.5 acre into segments and composite the excavation floor is not reasonable.

This is due to the COPC's which are volatiles. At another Region 5 site (Summit Equipment and Supplies) the COPC's were PCB's, and metals. At another site which I'm currently working on with the Bureau of Reclamation, the COPC's are metals. At that site we are evaluating 40 point composite samples over 1/4 acre areas.

So, unfortunately any verification sampling conducted at CRS after verification would need to be grab samples. Compositing samples for volatiles I fear will result in a loss of VOC during the sample processing, and handling. However, I have some other ideas I would like to share with you, and I have some additional questions.

After reviewing the data in detail for TCE concentrations in soils at the site, the RAO is still exceeded at depths greater than 4 feet, but they are very limited. Specifically, at the 4 - 8 ft. depth, TCE is above the RAO at GP39 (16 ppm). The only other data point at a depth below 4 ft. above the RAO is at location GP38 where the concentration was recorded at 15 ppm (12 - 15 ft. interval).

Despite the fact that the above detections are slightly above the RAO (which is a direct contact standard), I believe these could be disregarded considering their depth, and those concentrations are well below leach-based standard for ground water.

If you look at remaining concentrations of TCE above the RAO, it's actually limited to 5 locations at the 0 - 4 ft. depth range. Those are HA-2, GP38, GP37, GP39, and GP40.

I've attached a diagram in PDF of a sketch for your consideration. I've carved out 2 main areas targeted for excavation which are designated as A1, and A2. The rest of the area already meets the RAO, and would EPA consider limited excavation or perhaps none at all in those specific areas? Please keep in mind this is only a rough idea, and a thought !

The main question I have for you good folks is the hashed area on the diagram. Will excavation be required in the south half of the 0.5 acre. I think it would be difficult to negotiate or justify a 4 ft. dig in this area due to a lack of data supporting the need for that. Will the Agency ask for sampling in this area, or can we live with the information that we have?

Perhaps we can have another short internal call over this, or at least prior to tomorrow's meeting with the Site Group.

In any case, area A1 is approximately 30' x 95', and A2 is approximately 50'x50'. At a 4 ft. depth of excavation, the math is easy to do for estimating the volume of soil to be removed.

As far as verification sampling to see if excavation has met the cleanup

level, I say we leave it to the Site Group to propose a plan that is acceptable, and defensible. They could likely still evaluate a surface weighted average concentration (SWAC), often the 95% UCL of the mean to the TCE RAO of 14 ppm.

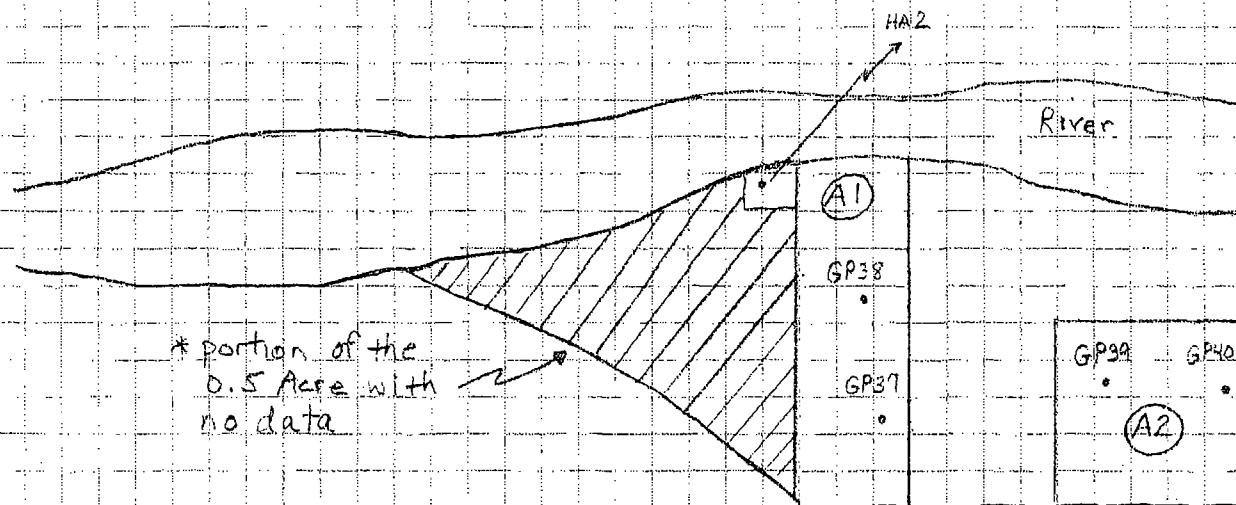
I must reiterate that this is just a rough idea, and not necessarily what I think should be done. U.S. EPA is the lead on this, and we will support your decision. I was just trying to think of something that would be more amenable to the Site Group and at the same time meet the needs and performance standards of the cleanup.

Please let me know what you think.
regards,
L. Antonelli



CRS diagram.pdf

→ North



Concentrations > RAO (0-4' depth) for TCE

HA-2 (15 ppm)

GP38 (39 ppm)

GP37 (450 ppm)

GP39 (120 ppm)

GP40 (220 ppm)

0 10 20 30 40 50
approx. scale (feet)